

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.

: 10/720,278

**Applicant** 

: Alain POIRAUD

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## DECLARATION OF ALAIN POIRAUD PURSUANT TO 37 C.F.R. § 1.132

I, Alain Poiraud, hereby declare as follows:

- I am the inventor of the invention disclosed and claimed in the present
  U.S. patent application.
- 2. I have been an ocean engineer for 13 years. I have 45 years sailing experience. I am the designer of the Spade anchor. I founded the Spade Anchor Company and am currently the General Manager thereof. I am the author of a French book "Tout savoir sur le mouillage", published in German under the tittle "Besser Ankern" and under printing also in English by one of the leading US Nautical publisher under the tittle "The Complete Anchoring Handbook". I consider myself to be an expert on ocean anchor designs and am one skilled in the art with respect to my own invention.
- 3. I have carefully reviewed the Office Action dated September 13, 2005, in the present application along with the cited prior art. I respectfully disagree with the positions taken in the Office Action and submit the following:

- A. The definition set forth in the Office Action for ballast, i.e. any such weight that is provided in addition to the original weight of the fluke so as to further increase the total weight of the fluke, is not proper.
- B. The present application as filed includes a definition of a non-ballasted anchor that distinguishes non-ballasted anchors from ballasted ones. The description reads:

The anchor is unballasted, in that there is no need to provide additional ballasting on the fluke – as in EP-B-0 840 691 or in FR-A-2 820 108.

(Page 2 lines 34-36). Thus, the description in the present application indicates to one skilled in the art that a non-ballasted anchor is such that there is no need to provide additional ballast, such an additional ballast being represented in EP-B-0 840 691 and FR-A-2 820 108.

- C. As set forth in the present specification and according to the ballast definition of set forth in the present application, the thicker part of the anchor disclosed in FR-A-2 820 108 is an <u>additional ballast</u>. Hence, one skilled in the art would understand from reading the present specification that the chevron tip part made of cast lead or cast steel represented in EP-B-0 840 691 is an <u>additional ballast</u> according to the ballast definition of the present application.
- D. Likewise, the present application states that a ballasted fluke is as disclosed by the prior art. (Page 3 lines 1-2). Referring to the prior art, the present

application states that the center of mass of the fluke is near to the tip of the fluke – due to the ballast. (Page 3 lines 2-3). In FR-A-2 820 108, the thicker part of the fluke is responsible for displacing the center of mass of the fluke near the tip. (See Figs. 1 and 2 and page 4 lines 11 and 19-20). Similarly, in EP-B-0 840 691, the chevron tip part made of cast lead or cast steel displaces the center of mass of the fluke near the tip. Thus, one skilled in the art would understand that the prior art mentioned in the present application, EP-B-0 840 691 and FR-A-2 820 108, describe ballasted flukes according to the ballast anchor definition of the present application. Further, one skilled in the art would understand that the thicker part in EP-B-0 840 691 and FR-A-2 820 108 is ballast according to the ballast definition of the present application.

- E. The explanation set forth in paragraphs 3.A-D above is consistent with what one skilled in the art would understand the term ballast to mean with respect to anchors.
- F. Prior art non-ballasted anchors do not have sufficient weight at the tip and require an additional roll bar on the rear part of the fluke to facilitate its penetration by allowing the anchor automatically to be in preliminary anchoring position. Yet, if this roll bar allows the automatic positioning of the anchor, it adds weight on the rear part of the anchor, and not on the tip.
- G. The present invention improves over the prior art by, *inter alia*, fixing the shank on the front half of the fluke and, hence, using the weight of the shank to replace the need for ballast. By avoiding ballast, the present invention can, for a given weight, increase the surface area of the fluke significantly as compared to

ballasted anchors. Subsequently, the present invention increases the set of the anchor in the same proportions.

4. In my opinion, as set forth above, the prior art fails to disclose or suggest the features of the presently claimed invention. Namely, the cited prior art describes ballasted anchors that cannot achieve the significant improvements that the present invention provides.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

Alain Poiraud